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ABSTRACT

A discussion of approaches for teaching foreign language vocabulary is based on the distinction between "declarative knowledge" of the meanings of words and the procedures used for achieving this declarative knowledge. These procedures form part of individuals' knowledge of how to negotiate meaning. It is proposed that a communicative view of the interactive nature of lexical negotiation requires that language instructors focus as much on procedures as on the more narrowly defined declarative meanings of words. This requires an approach to vocabulary development that is richer than traditional impoverished approaches that concentrate on building a store of definitional meanings. It is suggested that previously-developed theory on the four dimensions of communicative competence (Canale and Swain, 1980) be used to create exercises that address these dimensions lexically as a prelude to task-based vocabulary learning. The use of several exercise types in the classroom is described. Eighty-one references are listed. (MSE)

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PROCEDURAL AND DECLARATIVE KNOWLEDGE IN VOCABULARY LEARNING:

COMMUNICATION AND THE LANGUAGE LEARNER'S LEXICON.

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In this article I distinguish between the 'declarative' knowledge 'that' words have particular meanings and the procedures we typically employ for realising or acheiving this declarative knowledge. Such procedures form part of our 'procedural knowledge of 'how' to negotiate. Examining the role of lexis in such procedures is a step we must take if we are to make our description of lexis participant-oriented and hopefully, thereby, more closely attuned to the user's mode of knowing than analytic descriptions of lexis in isolation from use. A communicative view of the interactive nature of lexical negotiation requires that we focus pedagogically as much on procedures as we do on the more narrowly defined declarative meanings which specialist words have. I then argue that this requires us to take a 'rich' view of what is involved in learning vocabulary as a framework for language teaching. I contrast this with the more traditional 'impoverished' approaches to vocabulary building which concentrate simply on building up a word store of definitional meanings. My own suggestion for a framework which can be used in developing materials to promote lexical competence is to adopt Canale and Swain's (1980) checklist of the four dimensions of communicative competence, and I present exercise types which exemplify how these dimensions could be covered lexically, as a prelude to task based vocabulary learning extensions.

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General Words, Technical Words And Negotiating Meaning

There is an obvious, and much investigated, difference between specific, technical words and the more general 'core' words often used to convey those 'technical' meanings carried by the specific words (see, for example, the early work of West (1953) on a 'defining' vocabulary, and Carter (1986, 1987) and Stubbs (1986) who both describe various tests for 'coreness' of vocabylary). However, most previous studies of the relationship between general and specific words have concentrated on the extent to which lexical items can be 'systematiclly' distinguished from each other, and accordingly the various 'semantic' and 'grammatical' differences between core and non-core words have been itemised. (e.g. the relationship between coreness and superordinacy, or between core words and neutral tenor of discourse, or marked and unmarked levels of specificity:see the tests in Stubbs and Carter, and the work of Halliday (1978) on 'tenor', and Cruse (1977) on 'specificity'). Such studies tend to treat 'core' words as a special 'kind' of vocabulary (though the emphasis in Halliday's and Cruse's work is on the 'communicative function' served by neutral tenor, and unmarked choices of specificity), and attempt to distinguish them as a 'product' from more technical words. This is particularly so in the attempt of Stein (1978) to fix a 'nuclear' vocabualry, on semantic grounds, which can serve as a component of the 'nuclear' English which Quirk (cited in Carter 1986) has envisioned as being as 'culture free as calculus'.

My concern, though, will be with how such words are 'used' in the process of discourse negotiation, as part of the means available to teacher and learner for deploying strategies to overcome problems in communication. This reflects a wider conviction that attempts to locate potentially useful dsitinctions between words , which result in reduced or 'staged' vocabularies for language learners, within a framework which takes little account of their 'actional' nature in discourse is fundamentally mistaken. In fact the preoccupation with a 'lexicon' itself (see Fromkin 1987); with the modular organisation of 'words in the mind' (Aitchison 1987), obscures the fact that we have no access to such a repository except via 'words in the air' or 'in the text'. Yet the framework necessary to aid the description and observation of the discourse properties of lexis remains largely undeveloped (though

see the work of Winter 1977, 1978: McCarthy 1984, 1987: Brazil 1985). This is perhaps a result of the covert influence which the conception of the 'static' repository metaphor for the lexicon, familiar from many current theoretical frameworks like 'lexical functional grammar' (Bresnan 1982), ' generalized phrase structure grammar' (Gazdar , Pullum 1981) and the like, has exerted on language teachers' attempts to conceptualise the problems involved in developing lexical competence. But to represent the language learner's, and language user's, lexicon as a 'box' into which we can put things is inadequate at best, and at worst a misrepresentation which creates confusion. The lexicon is also 'fluid', and a medium 'through' which meanings are carried and negotiated. In other words, my claim is that the debate about the development of lexical competence has focussed on developing the learner 's 'declarative' knowledge 'that' relations exist between words (see Crow, Quigley 1985 and Rudzka et al for work on semantic field theory 1982,1985), or 'that' words have static meanings, and largely ignored issues relating to the 'procedural' knowledge (the term is Widdowson's 1983:95) a learner must have of'how'to realise these relations and meanings as 'use' in actional contexts.

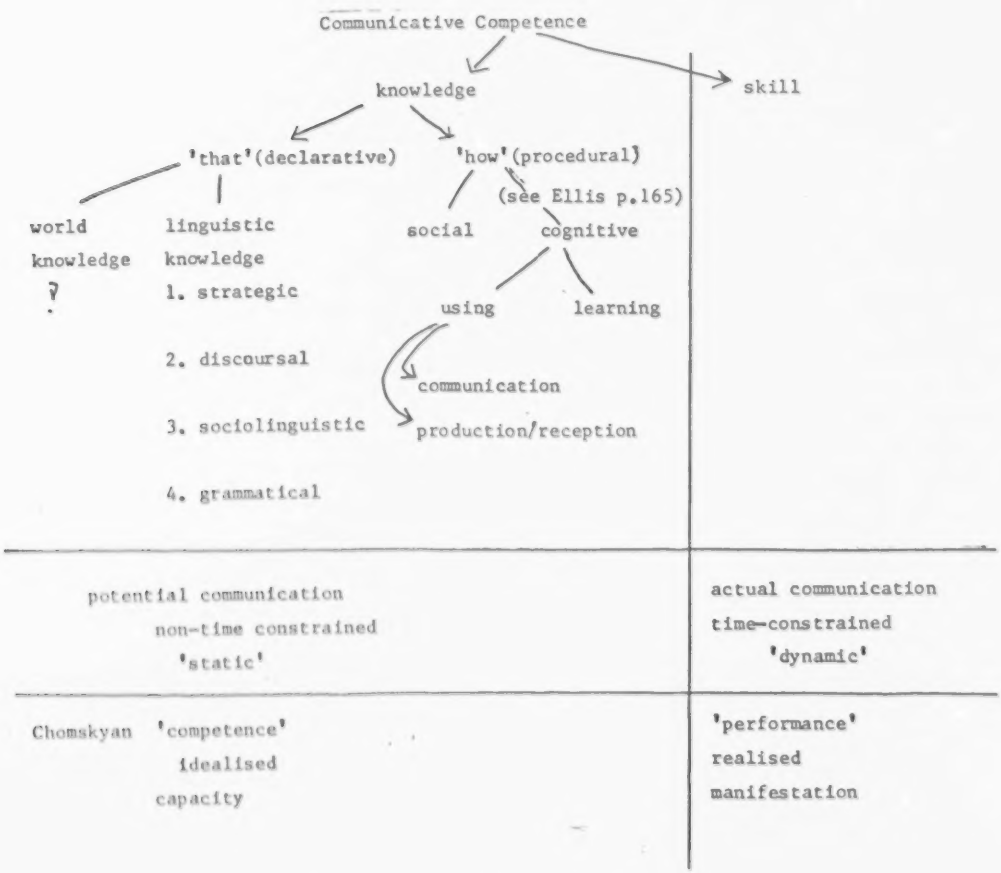
For example here is Nation's schema for representing what is involved in knowing a word:

form	spoken form	R	What does the word sound like?
		P	How is the word pronounced?
	written form	R	What does the word look like?
		P	How is the word written and spelled?
position	grammatical patterns	R	In what patterns does the word occur?
		P	In what patterns must we use the word?
	collocations	P	What words or types of words can be expected before or after the word?
		P	What words or types of words must we use with this word?
function	frequency	R	How common is the word?
		P	How often should the word be used?
	appropriateness	R	Where would we expect to meet this word?
		P	Where can this word be used?
meaning	concept	R	What does the word mean?
		P	What word should be used to express this meaning?
	associations	R	What other words does this word make us think of?
		P	What other words could we use instead of this one?

and many materials seem to concentrate on developing a static-taxonomic declarative knowledge of a number of these aspects in relation to words on a particular word list; often overemphasising some, like conceptual knowledge, at the expense of others like word form, graphological and phonological, as Dussere (1988) and Meara, and Ingle(1986) have recently pointed out.

But to what extent do such materials also attempt to develop 'pragmatic' ability in the use of such words, and is a categorisation like Nation's adequate to a communicative orientation to lexical development. I will be proposing a rather different set of categories for grouping lexical knowledge based on Canale and Swain(1980) and Canale (1983).

Here, then, is a diagram showing the relationship of the different terms I have used so far, and which I will be returning to. Communication, it can be seen, involves the conversion of knowledge into skill; that is the mobilisation of both declarative and procedural knowledge in time constrained, goal oriented discourse. Communicative competence, of course, includes not only the idealised declarative knowledge we have of word meaning, but the procedural knowledge we draw on in converting that knowledge to performance.



I want to look first , though, at the properties of some words that are particularly important to the ability to 'do' things in discourse via the exercising or application of communication strategies, like 'paraphrase', 'substitution' 'circumlocution' identified by Faerch and Kasper (1983) and summar-sed in Ellis (1985). Having looked at the pragmatic properties of such core words, I will thenmove to describingaspects of lexis which can be developed within the framework suggested by Canale and Swain. In this way I hope to show the relationship between procedural and declarative knowledge , and draw implications for vocabulary teaching. First, procedurality.

Acknowledging Procedurality

The procedural, enabling facility which some words have has long been recognised. It is particularly evident in the simplified language of 'motherese' (Snow 1973), and 'foreigner talk' (Ferguson 1971: Blum-Kulka, Levenston 1979), and it is as much in evidence in spoken, as in written language. For example, it is a criteria for selecting the words used in di ctionary definitions, like this entry from the Collins COBUILD Dictionary:

> **vermicelli-** **a food made from flour** paste in the form of **very thin strings** which have been dried and **are made soft again** by boiling
>
> **vermiculite-** **a type of MICA that is a very light material made up of thread like parts, that can be used for keeping heat inside** buildings...

This enabling facility is a feature too of the subtechnical language used in the oral explanation of difficult, technical concepts. Hutchinson and Waters (1981) have demonstrated the problems learners face in coping with these words. They claim that it isn't the 'performance' repertoire of a technical, specialist vocabulary which is called on in giving and understanding technical classroom explanations, but language like- ,'Now copper is very ductile. What do we mean by ductile? It'll stretch - we can stretch it. We can change its shape, yes'. (1981:6).

They conclude from their observations that, ' the student does not need the specific vocabulary of his subject area prior to starting his course. He needs the ability to recognise the glossing techniques whereby teachers introduce specific terms, abd the ability to ask questions when an explanation is not given. But the basic resource of both these strategies is a fund of general vocabulary in which the explanation will be expressed'.(1981:6-7).

These 'general' words are thrown up, together with more specific words in any frequency count of a specific language area or 'field of discourse' in Hallidayan terms (1978; Benson , Greaves 1981). For example, here is Friel's verb frequency count (1979) of legal texts in which both general and specific words occur together;

Table of Verb Frequencies

OF	VERB	TLE	RF	NF	CS	HS	OF	VERB	TLE	RF	NF	CS	HS
1	*be	1758	855	903	•	•	49	agree	26	13	13	•	
2	*have	195	105	93	•	•		exercise	26	12	14		
3	commit	138	39	99				want	26	5	21	•	
4	*make	136	82	54	•	•	52	abolish	25	3	22		
5	*give	122	55	67	•	•		*arise	25	11	14	•	•
6	*cause	115	34	81	•	•		*keep	25	22	3	•	•
7	*do	104	24	80	•	•	55	*include	24	17	7	•	•
8	*say	102	48	54	•	•	56	entitle	23	13	10		
9	*take	100	43	57	•	•	57	appoint	22	7	15	•	
10	*find	86	47	39	•	•		deal	22	14	8	•	
11	*try	77	19	58	•	•		order	22	7	15	•	
12	*think	76	31	45	•	•		*prevent	22	12	10	•	•
13	*provide	69	29	40	•	•		*seem	22	15	7	•	•
14	arrest	61	6	55	•		62	happen	21	4	17	•	
15	come	56	21	35	•			impose	21	7	14		
16	*follow	55	36	19	•	•		refuse	21	11	10	•	
17	apply	54	41	13		•		state	21	14	7	•	
	kill	54	6	48	•		66	authorise	20	7	13		
19	*know	52	12	40	•	•		execute	20	16	4		
20	*appear	51	25	26	•	•	68	determine	19	17	2		•
21	*consider	46	25	21	•	•		issue	19	17	2		
	hold	46	25	21	•			justify	19	10	9		
23	*pass	44	10	34	•	•	71	affect	18	3	15		
24	*use	43	26	17	•	•		result	18	10	8	•	
25	*see	41	17	24	•	•		suspect	18	-	18	•	
26	mean	40	13	27	•		74	argue	17	11	6	•	
27	*go	39	13	26	•	•		ask	17	4	13	•	
28	consist	38	7	31		•		*contain	17	8	9	•	•
	convict	38	26	12				create	17	3	14		
	*put	38	14	24	•	•		*depend	17	14	3	•	•
31	*become	35	24	11	•	•		deprive	17	5	12		
32	attend	33	4	29	•			*get	17	5	12	•	•
	receive	33	14	19	•			*lead	17	6	11	•	•
34	require	32	23	9		•		proceed	17	15	2		
35	establish	31	17	14				represent	17	7	10	•	
36	*act	30	11	19	•	•		submit	17	12	5		
	*call	30	21	9	•	•	85	assist	16	8	8		
	decide	30	16	14	•			continue	16	14	2	•	
39	intend	29	14	15	•			declare	16	12	4	•	
40	bring	28	21	7	•			*work	16	7	9	•	•
	constitute	28	17	11			89	*begin	15	5	10	•	•
	direct	28	18	10	•			delegate	15	3	12		
	prove	28	17	11	•			enact	15	15	-		
44	attempt	27	10	17	•			lay	15	9	6	•	
	charge	27	18	9	•			raise	15	7	8	•	
	convene	27	4	23				*refer	15	8	7	•	•
	punish	27	5	22	•		95	suffer	15	6	9	•	
	*show	27	15	12	•	•							

(from Friel 1979)

Identifying Specificity

The specific words give text what Benson and Greaves (1981) call 'institutional focus'. e.g. the word commit in the list above occurs regularly in texts associated with legal subjects. Note though that it is of almost the

same frequency in the legal texts used in Friel's sample as 'do', which is a word of much wider potential application. Frequency counts of specific subject areas thus fail to distinguish clearly between specific and general words. However , across subject areas, adopting the criteria of 'range' (Mackey 1966: Nation 1984) words like 'do' regularly occur, while 'commit' is much less common. General words can be further identified through applying the criteria of 'coverage', the ability they have to take on a variety of different meanings. It is this feature that I wish to concentrate on, and it is what Widdowson refers to when he calls words like 'do' procedural .i.e. they take on the 'indexical' values which particular cont exts attribute to them while having little independent meaning themselves. (1983:92-95). The index, as Widdowson makes clear, following Pierce (see Lyons 1977) is the referring function of the sign in context, where it operates to realise relevant schemata, as opposed to the structuring function of the sign as 'symbol' which operates to realise relevant 'systemic' knowledge. When words are used 'indexically' they refer the user out to the context of situation for the value they have; when used 'symbolically', as in many teaching materials, they draw attention to their own properties as structural elements defined by their relations with other symbols within a system.

Lexical And Indexical Words: Sense, Structure And Signification

Here the word 'do' is used to substitute for both 'pick' and 'open' respectively, and its interpretation is in each case dependent on knowledge of the relevant schema or frame of reference established by the context. :

- I wish you wouldn't do that (Pick your nose)

- Here let me do it. (Open the door)

It may be that confusion arises between the speakers over what in the immediate environment is being reffered to;

- I wish you wouldn't do that
- What, smoke?
- No, flick your ash all over the floor

in which case 'do' can receive more than one interpretation, as ,of course, it must do in question forms;

- What shall I do now?

where the reply must contain a specific verb to fill in the indexical 'gap' left by 'do';

- Rinse the beans
- Sauté the potatoes-

Alternatively the object can specify the indexical meaning of 'do' inditectly. Though this can be ambiguous;

- What shall I do now?
- Do the potatoes
- Peel them?
- No, wash them first.

'Doing' the potatoes refers to a whole host of activities that can be performed on them. Contrast these problems with the specificity of 'anaesthatize' in ; 'Who shall I anaesthatize next?'- or 'peel' in ; 'What shall I peel now?'

A consequence of the high indexicality of 'do',then,is that it is non-monotonic (or multi-tracked, enabling the user to go back and change assumptions which originally took a wrong track , see Doyle 1979) with regard to specifying a frame of reference. This means it is possible to revise existing assumptions about what action is being carried out when 'do' is used.

However, highly schema -specific 'anaesthatize' is monotonic and carries with it a fixed set of assumptionsabout the action referred to. Metaphor is based on assumptions about shared knowledge of features, which are transferred to a second object. 'I'm going to anaesthatize' John', spoken in a bar might be taken to mean, 'put to sleep with a strong drink'; spken by a child with a sewing needle it takes on a different meaning, because different assumptions about features of 'anaeasthatize' are being transferred. 'Do' isn't much use as a metaphor though, because there are few assumptions about its meaning that can be fixed, and so shared, except 'action'. There are of course grammatical features, like 'verb' and 'present'tense', and these, as Widdowson shows (1984:11) in his analysis of cummings' poem:-

anyone lived in a pretty how town
with up so floating many bells down
spring summer autumn winter
he sang his didnt he danced his did

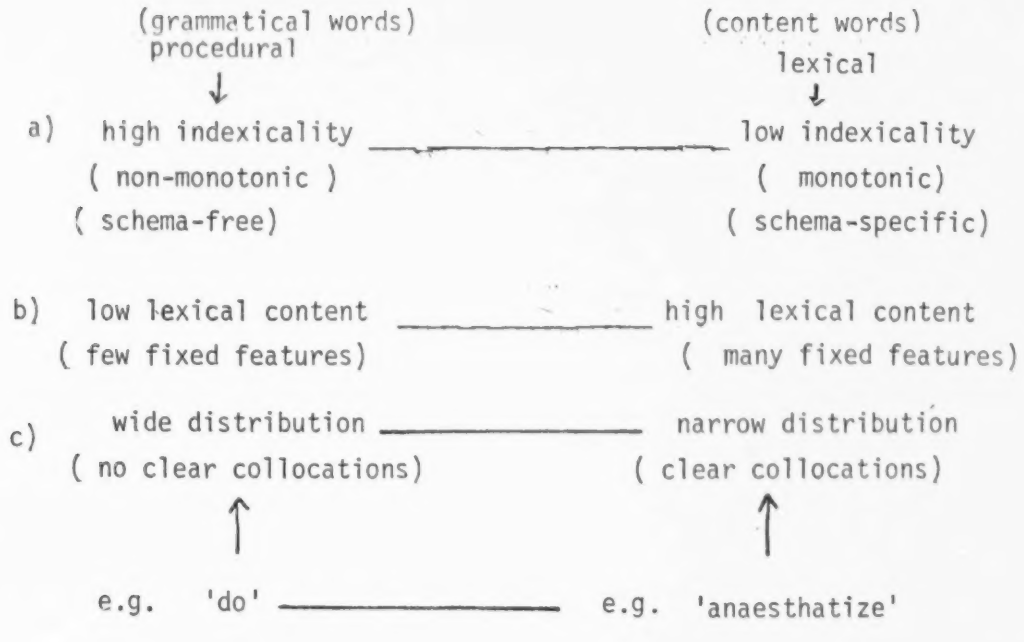
can be material out of which to construct metaphor. In this case 'did' carries the features of 'past' and 'verb' but transfers them to the context of 'noun' in the syntactic structure of the sentence. No noun has the features'past time' and 'process' and nothing else. 'Cummings creates a noun which has those features, 'did': We might paraphrase the expression 'he danced his did' as something like 'he danced his way through all his activities in the past' '.(1984:11).

'Do', then, is highly indexical and non-monotonic schematically. It also has little lexical content and this , generally, means it is less likely than more lexical words to be used metaphorically. There appear to be few assumptions we can make about the context free features it has, except 'action', 'verb', 'present'. This is the reason it also has high 'symbolic' value as an exemplar of those categories which are important to structuring the grammatical system, like 'tense' and 'part of speech'. We can also add that words like 'do', 'it', 'she ' etc., appear to be 'iconic', (see Haimann 1985) the third function of the sign distinguished by Pierce (see Lyons 1977). The icon is the resembling function

of the sign, and signs are icons when there is some perceptual similarity between the signifier and the signified. In other words, the form of the signifier is motivated by the signified, the relationship is not completely arbitrary , e.g. as with onomatopeaia. So, to the extent that 'do' is schematically empty, like 'it', out of context, (apart from the minimal features of 'action' etc.) it could be thought of as a semantically 'reduced', or 'little' word, and this aspect of delexicality is indeed represented iconically in that such words are usually small, and much smaller on average than 'lexical' words, like, typically, 'anaesthatize'. This may give them greater 'saliency' for L1 and possibly L2 learners, particularly with regard to the extraction of variable units in morpho syntactic frames using those 'operating principles' described by Peters(1985). Technical words, then, 'tend' to be larger and one obvious reason for this is that 'lexical' words are more morphologically productive and so have inflections which increase their size. In this way the 'littleness' of the tokens for procedural words is an example of iconicity, resembling their reduced 'lexicality'.

A further observation about procedural words and specific words is that the former contract no clear collocational restrictions. For example 'strong' and 'tea' collocate, or co-occur quite regularly, whereas 'powerful' and 'car' also collocate. But this is not reversible, 'powerful' and 'tea' do not co-occur or collocate significantly, and neither do 'strong' and 'car'. (See Halliday 1966: Sinclair 1966:1986:McIntosh 1962). The reason procedural words do not have clear, or narrow collocational restrictions is that they are extremely mobile and occur in many environments, with many other words. Their collocational distribution is wide and unfixed. Lexical words like 'strong' and 'powerful' of course, with a narrower range of distribution, do collocate significantly, and this is the basis of analyses of 'field' of discourse in the Hallidayan sense (Benson and Greaves 1981).

Let me now bring this group of distinctions together in diagrammatic form so as to illustrate more clearly the differences between general and specific (procedural and schematic) words. Procedural words would be located to the left of this series of clines:



We can give our examples 'do' and 'anaesthatize' in relation to these clines. Of course these clines can also be used to distinguish supposedly grammtical words from lexical or full words. The clines also correspond to the function procedural words have on three separate planes;a) the semiotic plane, b) the semantic plane and c) the syntactic plane.(Robinson 1987b).

Sinclair and Renouf (1988) have recently named the class of indexical verbs like 'do' 'delexical', and based on large computer concordances of text they identify a large number of these verbs and their auxiliary supportive function. They appear most commonly in the context of other words whose meanings they adopt; 'Textual evidence shows the extent to which the phenomenon of delexicality occurs, The primary function of 'make' for example, is to carry nouns like 'decision', 'discoveries', arrangements', thereby offering the alternative phraseology, 'make your own decisions' to 'decide on something' etc'(1988:151). And this presents a pedagogic problem, for although these words are unduobtedly useful to the leaner as a resource for conveying the meanings of more specific words, their very generalityoften causes the learner problems. For example, given Sinclair and Renouf's comment, how do you teach the range of uses and contexts of a word like 'make', and its consequential range of collocates; e.g.

make a million, make a decision , make a cake, make a promise

It is of course through teaching words like 'decision'

and 'cake'.

- What does 'cake' mean?
- Well you make a cake, like this....

-W hat does 'make' mean?
- Well you make a cake , or a decision...

And so the two, procedural and specific words, mutually feed off and support each other. While appearing to have different distributional characteristics,then, procedural and specific words are in a complementary relationship with each other. Empty, procedural words realise the schematic meanings specific words have, while the 'contentive', lexical, specific words demonstrate the 'capacity' general words have for doing just that.

Asserting And Assimilating Meanings

In fact the two types of word seem to correspond to two different ways of meaning. The meanings of 'make' are 'potential', while those of 'decision, commit' etc. are schematic. Now these two sorts of meaning are involved typically in any negotiation, particularly those in the technical classroom. The effort of one participant is often to fix, or explain what he or she means by finding the 'right word', as it were (say 'anaesthatize') while the other, more suppliant partner, tries to 'see' what he or she means. In other words, one tries to 'assert' a meaning while the other tries to break what is said down into more maneageable or familiar units so as to 'assimilate' them (say 'put to sleep'). Now the teacher is often called on to perform both jobs at once, as Hutchinson and Water's example above shows. He offers the asserted meaning, and then in the face of real or anticipated incomprehension he breaks it up so as to make it assimilable - 'ductile'—

'stretch; change shape'.

Here is another example of procedural vocabulary at work, 'realising' these procedures for making sense. The 'declarative ' knowledge, the meaning being asserted, is 'tripod'. The procedural words used to break this down include, 'legs, stand,three'etc.

learner	teacher
	and the em... video camera is supported by a tripod see, here...
teacher, what means 'tripod'?	
	em....it has three legs, see here...tri means three, pod means legs....three legs....it er, holds it up, its a sort of stand..
'stand'	
	yes, it stands on it...

Incidentally, this example also serves to illustrate the point Allwright has made recently when he comments (1986:187)'Learners in class seem to focus their energies on lexis and ask questions about it, and possibly get all sorts of grammatical help via the lexis...if we study the processes by which lexis is acquired, we may get closer to the way grammar is acquired...In a sense they (learners) put their agenda on the lesson through the questions they ask about words. So one might end up seeing a natural process of grammar acquisition through the natural process of asking about words'.

In the exchange above we can see the teacher illustrating two sorts of grammatical information for the learner. There is the derivational link between the noun, 'a stand' and the verb 'stand', which the teacher illustrates by providing relevant 'frames' for each part of speech;

- its a sort of stand

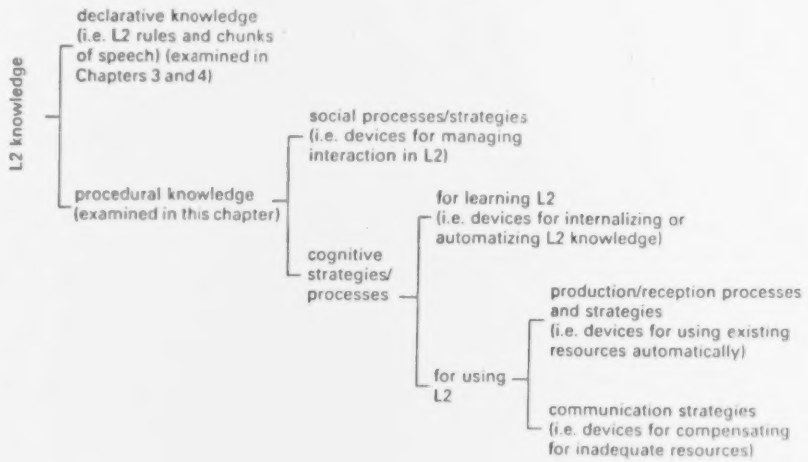
- yes, it stands on it

And this process is analogous to the parent's repetition of learner units, and variation of elements within those units, which Peters (1983) has suggested are the basis for the language learner (in the L1 or the L2) to perform the analytic process of 'fission' on, thereby gaining structural information about individual elements and larger patterns. (see Robinson 1986). The second sort of grammatical information, then, is closely linked to the provision of a 'frame' or pattern for the verb. By giving the example ' it stands on it' the teacher demonstrates that typically the verb requires a two place predicate slot, involving a preposition and an object noun. We can see, then, that this small exchange could illustrate the process whereby the learner begins to develop hypotheses, or to confirm them, about verb valency or the grammatical dependencies between the verb and its frame (see Robinson 1986), and about the derivational link between the noun form and the verb form of 'stand'. (See also Ard, Gass 1987 on learning grammar via lexis).

The procedural vocabulary is essential to this process. It not only provides the means for negotiating the lexical meaning of 'tripod', via such words as, 'legs', holds up', 'three', but it is also used to provide fillers for the grammatical slots in a frame that the learner is potentially seeking to analyse and make generalisations about. For example the use of 'it' as a dummy NP is particular ly important here.

The learner simultaneously makes 'sense' and 'structure' via the contexts provided by the negotiation of the meaning of 'tripod' and 'stand'. This process involves, as I have illustrated, the 'assertion' and the 'assimilation' of meaning. Two sorts of knowledge are involved; the 'declarative' knowledge which the teacher is asserting, (that the 'thing' is called a 'tripod'), and the procedural knowledge of how to make this assimilable for the learner using a reduced vocabulary. The fact that such a reduced, 'indexical' vocabulary is there, in the language system, is probably a systemic 'reflex' of these negotiating procedures born of the need to have such a resource to enable the processes I have described to operate. The vocabulary, in other words, is a reflex of its use.

This means then, that the 'core' vocabulary I have exemplified via 'do' is important both at the level of 'communication strategies', which relate to the ability to 'use' language, and also at the level of those 'cognitive' strategies, and processes underlying them, for understanding language structure as shown on the diagram I began with, and in this diagram, from Ellis (1985:165).


L2 knowledge
declarative knowledge (i.e. L2 rules and chunks of speech) (examined in Chapters 3 and 4)
procedural knowledge (examined in this chapter)
social processes/strategies (i.e. devices for managing interaction in L2)
cognitive strategies/ processes
for learning L2 (i.e. devices for internalizing or automatizing L2 knowledge)
for using L2
production/reception processes and strategies (i.e. devices for using existing resources automatically)
communication strategies (i.e. devices for compensating for inadequate resources)

Knowledge 'That' and Knowledge 'How': Materials And Methodology

The issue of concentrating on a core vocabulary and the development of procedural knowledge is largely, I suggest, methodological, since it involves the contrivance of contexts for 'asserting' and 'assimilating' meaning which serve to realise the values of the two sorts of word I have identified as 'general' and 'specific'. I wish now to turn to the issue of materials and exercise types which can serve as the vehicle for such an approach to focus on in the classroom.

Firstly, a distinction is often made between the vocabulary learning demands of students of ESP and those on more general courses in EFL, or ESL. Where does the difference lie? It lies simply in that ESP contexts provide ready made schemata, and corresponding groups of specific words, which can be realised procedurally. (Widdowson 1983:95). This does not mean though that the declarative acquisition of content, adopting the lexicon-as-letterbox metaphor, should be the overall preoccupation of ESP courses. If procedural ability is not developed how does the learner cope with unforseen and unforseeable problems in understanding the use of semi-technical vocabulary? We cannot hope to provide the learner with all the meanings he will ever need. More

importantly, we cannot anticipate the different uses to which the words we teach the learner will be put in discourse. It is the ability to 'establish' meaning, and not simply the ability to bring a readymade meaning complete to a context that we must hope to develop. McCarthy has recently made the same points. Meanings are 'existential' and relate to the here-and-now of the discourse. (1987). They are means whereby speakers in conversation come to view the 'possible worlds' (Robinson 1987e) from which each views the interaction, and thereby come to convergence, or agree, as it were, to disagree. For example, McCarthy has shown that abstract, decontextualised semantic relationships like 'synonymy' are particular to an interaction, and do not preexist it. When treated within pragmatics he proposes that we relabel the relationship of 'synonymy', 'equivalence', to show that a word's , ' usefulness as an equivalent to another item is a local, existential value...which is different in kind from statements made in a decontextualised, structural description of the lexicon."(1987:183). Equivalences are negotiated in discourse by establishing a paradigm which the other speaker may accept , or reject. A prominent stressed syllable marks the speaker's choice of item as selective (see Brazil 1985), and the second speaker can either accept the meaning this item selects, or renegotiate by offering his own choice as selective in the paradigm by stressing the lexical item. When he does this he signals that he is adding some extra increment of sense to the first speakers choice or contribution. For example;

A: so you WANT to meet HARry

Here, 'want' and 'Harry' are each prominent, and therefore marked as selective for sense.

B: YES, and i'm dying to see BILL TOO

Here the second speakeraccepts the sense of 'want', and therefore his choice of 'dying to' is non-prominent, signalling that they are synonymous and occupy the same sense paradigm. However he could quite easily have marked his contribution as selective, by giving it prominence;

B: YES, and i'mDYing to see BILL

In this case he adds to or redefines the meaning of 'want to' offered by the first speaker, perhaps to show that he wishes to add an extra dimension of 'eagerness' than 'want to' expresses. We can show this using a 'componential grid (see Rudzka et al 1981:1985: Channel 1981: Lindstromberg 1985):

	describes a decision about the future	could be a long time away	closer to the present	implies eagerness & pleasure	implies seriousness & duty
want to	+	+			
dying to	+		+	+	
must	+		+		+

But this is only the result of a post facto analysis and reduces to semantics and what Widdowson has termed 'signification' (Widdowson 1978) what in actual 'use' is a pragmatically determined 'value'. Although the grid distinguishes want to and dying to it fails to show how in the first example I gave the speakers treat them as equivalent.

This is an important point. The declarative knowledge we have of sense relations like synonymy, antonymy etc. is a 'provisional', 'meaning bank'(Robinson 1988a)- or base competence - to be drawn on in discourse. Such relations are subject to negotiation, they do not pre-exist it.

But the arguments against an over preoccupation with declarative knowledge are not simply that it leaves the language learner with a static monolithic lexicon and little procedural competence in language use, but, as I showed earlier, if the opportunities to negotiate meaning via assertion and assimilation are not available in the classroom, then the learner is deprived of the means of learning 'grammatical', structural information via the negotiating process. It is of course true that with the specialist language of medicine, for example, some words do retain an

impermeable static sense, regardless of context; words like 'anaesthatize' 'synergetic' etc. But to treat all vocabulary development as analogous to the processes involved in learning such words is a misrepresentation. Here. for example is Diana-Adams-Smith's summary of her methods of presenting new vocabulary to second year pre-medical students at Kuwait University.

B. New vocabulary items have been presented to you in four different ways during the English course:

1. Words given in sentences in a context that makes their meaning clear.
   e.g. Synergetic drugs are drugs that work together to increase each other's effects. The three muscles that work together to flex the forearm are called synergetic muscles.
2. A list of words with meanings:
   e.g. nasomental - pertaining to the chin and nose
   ankylostoma - lockjaw
3. The use of word roots or groups of related words.
   e.g. path (o) - disease
   pathologist
   pathology
4. Sometimes the responsibility for identifying and looking up new words has been left to you.

(Adams-Smith 1979:26)

I have given reasons for believing such an approach to be too narrow, and to divorce declarative knowledge , which is fixed and static, form its procedural realisation in particular contexts, with the twin consequences that this has: that it both misrepresents the

fluid nature of the discourse lexicon, and that it passes over the context that meaning negotiation, using general and specific words, can provide for the simultaneous development of sense and structure via asking questions about words in the classroom context. A 'rich' view of the development of lexical competence has therefore to provide for the development of procedural ability, and inevitably for the many ways in which lexical knowledge is drawn on in communication. This suggests the need for some sort of pedagogic framework within which to provide coverage of these aspects of communicative competence, and to focus the teacher and learner in their twin enterprises of asserting and assimilating meanings. The following suggestion is a 'contrivance' which aims to be useful by serving these ends, and also to provide the basis for a wider 'variety' of exercise types than are commonly found in many vocabulary teaching materials, where the preoccupation is often with variations on the simple , gap-and-filler type formula, or the matching of words and sentences in the manner suggested by Adams-Smith's summary above.

Having dealt with some implications of the relationship, as I see it, between declarative and proceduraldimensions of knowing a word I now turn to the declarative dimension, and a 'communicative' or more 'participant' oriented classification of the knowledge we have of lexis,(to adopt the ethnomethodologists' distinction between 'analyst' and 'participant' categories of description.)

Lexical And Communicative Competence

Canale (1983) describes communicative competence as 'the underlying systems of knowledge and skitl required for communication'(1983:5. See also Canale, Swain 1980). He distinguishes between four areas of this competence. 'Grammatical' competence is concerned with the user's mastery of the language code, vocabulary and linguistic semantics. He comments, 'it is still not clear that any current theory of grammar can be selected over others to characterize this competence'(1983:7). All of the three current syntactic theories surveyed by Sells (1985) have a much larger lexical component than was included in the transformational models of twenty years ago. Wasow comments in the postscript to Sells -' It is interesting that contemporary syntactic theories seem to be converging on the idea that sentence structure is generally predictable from word meaning, for this seems to be close to the naive view of a great many non-linguists'.(1985:204). Naive or not the traditional wedge driven between syntax and lexis seems increasingly

insubstantial, and to be a theoretical obstacle to those like Allwright who seem to view the acquisition of structure as simultaneous, or consecutive to the acquisition of lexical knowledge. A lexically based grammar seems more likely to be most closely attuned to the learners perceptions of how the 'units of acquisition' (Peters 1983) are to be broken down and stored as 'frame' patterns (Robinson 1986 : 1988c Hasan 1987: Hudson 1984, 1986).

'Sociolinguistic'competence is involved in decisions about appropriacy of alnguage to context, at the levels of both meaning and form; for example, whether it is appropriate to 'complain' in a given situation, and whether to do so formally or informally (meaning), and given that it is appropriate how is the formal or informal complaint realised (form). Since this involves decisions about when and how to interact this spills over into 'discourse' competence- the ability to construct,and maintain in negotiation, properly cohesive and coherent talk and text.

'Strategic' competence is involved in decisions about how to repair breakdowns in communication, or decisions about how to enhance the message. Reformulations, for example, can serve either purpose, both as a way of presenting your co-speaker with your assessment of his/her 'gist' or propositional meaning (Heritage, Watson 1979), or 'upshot', the illocutionary meaning of the utterance. More is involved in each component than this brief summary suggests, and each component interacts with the others in any message. My purpose in identifying them separately has been to provide a 'variable focus' for vocabulary exercise types , which aim to give broad coverage to the range of abilities involved in developing lexical-communicative competence.

Where particular groups of students are involved, with particular 'needs' the coverage given to each of these aspects can be restricted to an extent. For example at the University of Bahrain where the materials below were used, two groups of students- engineers and business students- are likely to be involved in using English in different settings, to different addressees and on different topics etc., and this would affect the characterization of communicative 'sociolinguistic' performance we might wish to prioritize in their learning materials.

Similarly the situation of those students on an 'orientation' year , prior to beginning full time studies on specific degree courses, means that we might identify specific performance manifestations of 'strategic' competence as most immediately relevant to their future role as students; for example, asking for clarification by reformulating content, using reference sources to check understanding , coping with background noise while taking part in a laboratory session

etc. (see Canale 1983:22-25). These performance manifestations of the underlying competencies we are aiming to develop are motivating, because felt to be directly relevant, and can be seen as providing 'authenticating contexts' (Robinson 1987c) for validating the underlying competencies we are aiming to develop.

A further point needs to be made about learning styles. There are obviously a plurality of learner preferences as regards modes of studying vocabulary. Some like to learn lists, others do not enjoy active dictionary work, while others enjoy sifting through 'stories', or more technical literature in English and identifying lists of unknown words. Some like to pepper their speech, or written work with newly acquired vocabulary as a way of trying it out, while others are more cautious and less eager to convert their passive knowledge into the hard currency, as it were, of tokens in discourse. With this in mind we need to ensure that vocabulary development materials provide as diverse a range of exercise types as possible. Some materials and resource books do attempt to provide such diversity (Rinvolucri , Morgan 1986: McCarthy 1986: Gairns, Redman 1986: Nation 1984), while others seem much less varied, and preoccupied with one technique; the 'keyword' approach (Crow 1986); or with the use of componential and collocational 'grids' (Rudzka et al 1982:1985); or with the semi-automatic filling-in of words in long stretches of artificial and contrived text on the justification that this helps the learner to 'contextualise' the word he or she is filling in (Barnard 1972). Many materials do seem to be based on one view of 'how vocabulary is learnt', but the implication underlying the following materials is that there is no one way that is suitable to all learning styles, and that materials need to attempt to present as diverse a range of exercise types as possible to accomodate this plurality.

Learning predisposition in Bahrain is, in a sense, Koranic, with the consequent emphasis on rote memorisation. Vocabulary lends itself, as I have indicated, quite readily to this 'declarative' sense of what it is to know and learn. And primarily as a way of providing 'learning comfort', in the sense of continuity with the learning habits fostered in school, or through the study of the Koran, we provided Bahraini students with a lot of exercises that test vocabualry learnt in this way. For example there are many multiple choice quizzes

with the emphasis on all-or-nothing answers. Many 'frames' or definitional phrases which are recycled in computer lessons and which students like to 'learn-by-heart'. It is not the only way, or even a good way to learn the aspects of vocabulary use I have discussed above, and for the reasons I have given - but there is a point in providing this sort of exercise to students as a 'starting ' point for extension exercises, which draw on a declarative 'meaning-bank', and also as a way of creating a sense of 'security' or continuity in the learning environment.

Contextualising: Sociolinguistic Competence And 'Word Sets'

This artificial fixation of meaning, then, must be balanced by a procedural orientation to establishing word meaning in fluctuating contexts. This is the idea that lies behind many of the 'Word Set' exercises we use which are much more heavily dependent on teacher elicitation and aim to encourage learners to imagine 'possible worlds' to contextualise presented lexis; for example to identify some word as belonging to a particular register which will then lead them to access a relevant schema and then build lexical sets in relation to particular fields.

These exercises are therfore very open ended and draw on interpretative procedures, but they do assume that the 'declarative' base, the provisional definition, has been fixed in place first- perhaps in the manner described above, through the completion of definition frames. In this way we move from the declarative and definitive;

When we subtract an amount we take it away from a larger amount.

When we trade with another country we buy and sell goods to them.

A balance is an instrument for measuring weight.

A basis is the first thing or facts we need to know in order to compare two things.

A comparison is a way of deciding which is the better of two things.

Convenience is the degree os ease or trouble we have in doing something.

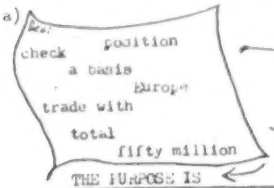
A dimension is something which can be measured like length or area.

to the procedural and fluctuating word set activities:

Word Sets

Ex.1. Do you remember the introductory reading exercises we did when we had to decide what the purpose of a text was and who the intended reader was? There were many things in the texts to help you decide the answers to those questions. One thing that can help you is the vocabulary. Here is a puzzle. There is more than one answer which might be correct. Look at the words below, from unit 5.; imagine they have been used in a letter. Can you decide who the intended reader of the letter might be, what the letter might be about, and what the purpose of the letter might be? Tick the ones you think might be correct.

a)



INTENDED READER

	a footballer
	an economics student
	a politician
	a physics student
	a shopkeeper

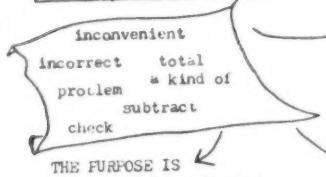
THE LETTER IS ABOUT

	the price of oil
	the World Cup
	making soup
	buying a car
	buying a company
	poetry
	a birthday

THE PURPOSE IS

	to persuade
	to advertise
	to give information
	to warn
	to amuse
	to complain

b)



INTENDED READER

	a computer programmer
	a shopkeeper
	a teacher
	a bank manager
	a car dealer
	your grandmother

THE PURPOSE IS

	to persuade
	to amuse
	to warn
	to complain
	to teach
	to advertise
	to agree

THE LETTER IS ABOUT

	a wedding
	a bill
	your salary
	a new car
	Arabic history
	a meal

My methodology in using this exercise has involved going round the class asking students to justify what seem to be unusual choices or decisions. e.g. how could a) be about a birthday?(I suppose a rich shaikh could be buying his son an oilfield or a large company). How could b) be about a meal? (I suppose it could involve complaints about the bill in a restaurant).

The important thing is to exploit as much as possible the leeway this provides students for imagining possible worlds (Robinson 1987e) or contexts which can justify their choices. Get them to explain as fully as they can and get the rest of the class or group to act as a sort of jury, passing verdicts on how

feasible each justification is. A lot of useful oral practice is generated in this way, and it has the attraction of 'puzzle value'.

My provisional answers are:

a) Reader - could be economics student, politician, but not footballer, physics student.'Trade' and 'total' seem to indicate that the field and registed are those of economics. It could be about the price of oil, buying a company. The purpose could be any of those given, except to amuse ; perhaps 'warn' seems most likely considering 'check'.

b) Reader - could be any of those given, except the grandmother. It could be about any of them except Arabic History or a wedding (unless the wedding involves a bill for the reception). The purpose could be warning, teaching, or most likely 'complaining', because of the negativity of 'inconvenient', 'incorrect', and the imperative 'check'.

The point of this exercise , as I have said, is to exploit the opportunities it provides for developing students awareness of the multiplicative perspectives that can be taken on the word sets, and inevitably therefore of the 'style' values and shifting meanings they contract in differing contexts. At a beginner level the basic idea can be presented through 'odd-one-out' exercises in which the learner has to identify which word doesn't belong with a particular 'schematic' group; i.e. is not a 'cooking' word, or a 'weather' word etc.

Here is another exercise. Again there are np absolutely correct answess to these questions, they are ways of making 'conscious' (Sharwood Smith 1985) the activity of sorting words into schemas and attributing frames of reference. These are what I mean by 'word sets' , the idea being that the frame of reference suggested by the title will constrain the selection of likely words.

This involves a sort of top-down word-setting, from titles to words, as opposed to the activity above where they are given some words and have to construct the setting in a bottom -up fashion.

Unit V

Extension Exercises VOCABULARY

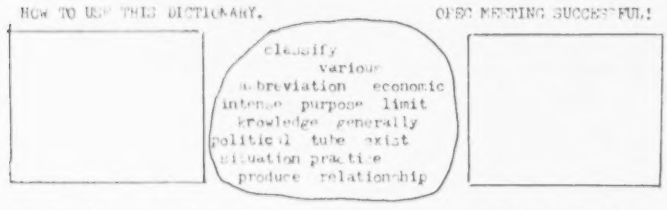
1. Word Sets; Predicting From Titles.

a) Here are the titles of two short pieces of writing:

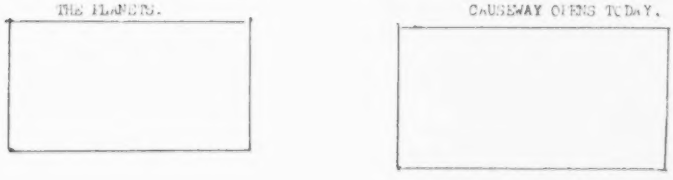
How To Use This Dictionary. OPEC Meeting Successful!

Where would you expect to find each of these - what are their sources? Who might the intended reader be? What do you think the purpose might be? Making guesses like this before you see the text is called predicting.

Look at the group of words from Unit 5. of Barnard given below. Decide which words could be used in each text and write them in the box. Some words may be used in both texts, others may not be useful at all.



b) Now look at words from other units we have done. Which words do you think would be used in texts with these titles? (Predict about ten words for each text).



Both of these exercises, then, apart from generating a lot of oral production through justifying choices, agreeing and disagreeing, are lead-ins to other skills areas; the first to writing letters and activities aimed at encouraging learners toadopt appropriate models of their intended reader (see Robinson 1987a); the second to prediction exercises which aim to develop purposive reading strategies(Gairns 1986; Robinson 1987c).

Associating: Grammatical Competence And 'Word Nets'

The above 'contextualising' activities take place in relation to 'word sets' which result from learner projections of possible shared 'sociolinguistic' settings. They therefore draw on and develop awareness of the conventions regulating participation in standardised speech events. i.e. how a particular addresser addresses a particular addressee to acheive a particular purpose through a particular channel , like written letter. (Hymes 1971: Malamah-Thomas 1986). In so doing they help to develop the

sociolinguistic dimension of communicative competence

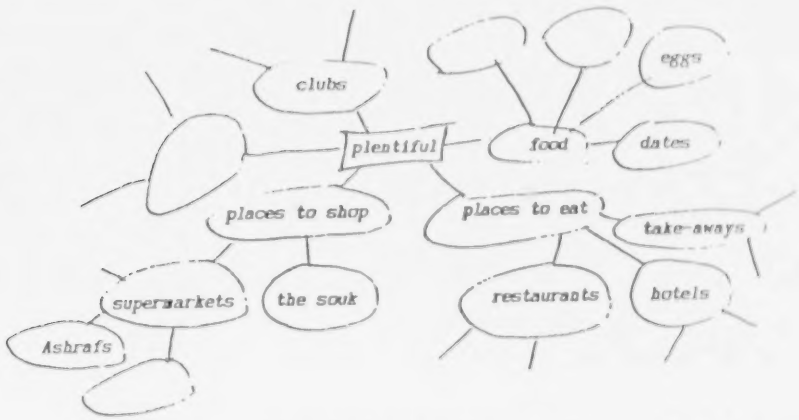
However other relations between words are more cognitive and private, 'intra-organism', not 'inter-organism' relations as Halliday has said (1975). These relations are independent of any conventions regulating participation in specific speech events and the 'Word Net' exercises aim to develop the learner's network of private 'psychological' associations, (see Blum and Levenston 1979 for their views on the contribution made by knowledge of 'sense relations' like synonymy , antonymy etc. to the L2 learner's developing semantic competence in the second language).

Here is an example of a 'word net';

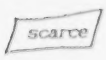
Word Nets

Plentiful and scarce are _____.

Look at the word net below for *plentiful* things in Bahrain. Try to complete it yourself by adding as many words for things that are plentiful as you can.

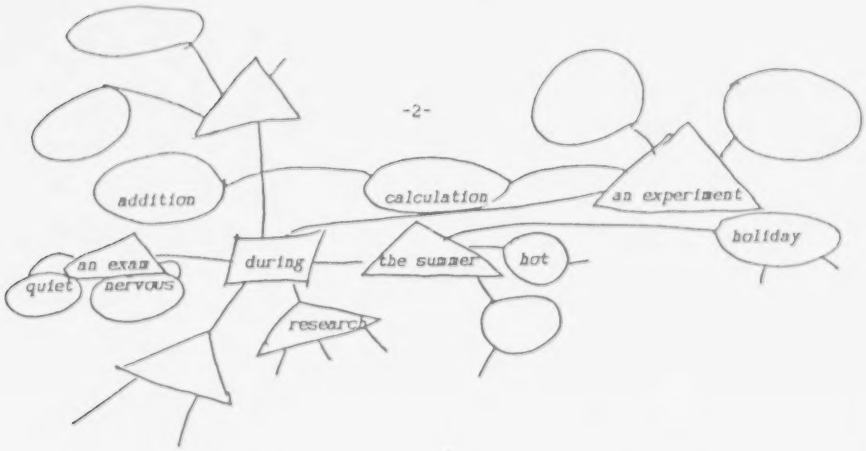


Now can you do a word net for things that are scarce in Bahrain, or Gulf Polytechnic?



Here 'plentiful' and 'scarce' are introduced as antonyms or opposites, and the learner has to add to the network. The covert organisation of this net involves attaching the central adjective to generic 'nouns', places to eat etc. which are the 'superordinates' of more specific exemplars. The net is therefore 'structured', but this

is not the focus of the exercise at the early stages. The aim is simply to encourage the learner to add words. At a secondary stage we return to the nets and use them as a basis for 'written' production of the vocabulary. Here we try to make the structural principles underly-ng the organisation of the net more overt. By adding symbols like this;



we canthen elicit and demonstrate relations of 'dependency'between the words(Robinson 1988; Hudson 1980; Matthews 1981). These dependencies are either of a structural semantic nature i.e. superordinate to hyponym, or grammatical, involving developing awareness of parts of speech. This is the basis of building simple sentence patterns like;

e.g. *During an exam the room is very quiet and I feel nervous.*

Try to use the words you have added to the net in your sentences. Write some examples here.

1. _____ .

2. _____ .

3. _____ .

In this way 'lexical' knowledge can be shown to lead to 'grammatical' awareness in the way referred to earlier. This is one way of learning grammar via. lexis. It makes 'overt' what Allwright has identified as the learner's covert acquisition of grammatical information via the procedure of asking questions about words, and returns us to the discussion earlier about the relation of procedural to schematic words and the acquisition of sense and structure.

Strategic Competence: Using Basic Words To Assimilate Meaning

Having touched on the sociolinguistic and grammatical dimensions of lexical competence, here is an exercise which refers back to my discussion of procedural and schematic words.

Using Basic Words

a) Some words in English are very general and can be used instead of a lot of other words. Here are some very general words:

let way watch get go guess do

and here are some words from Unit 9. Can you use the general words above to paraphrase the meaning of these words?

disappear predict revise direction
acquire observe enable

e.g. *What does enable mean? It means to help or let someone do something.*
What does observe mean?
What does revise mean?

Discuss the other words with your teacher. Which general words do you find helpful in paraphrasing and giving definitions? Write a list of them here:

b) Now, ask your partner to explain the meaning of one of the words from Unit 9. See if he uses any of your general, basic words. Does he? Now he will ask you to explain a word. Use your own basic words when you reply. QUIZ each other about words from other units if you have time.

Did you use any of these words?

thing	*used for*	*a kind of*	*can*	
	a sort of	*make*	*usually*	*is a*
	which	*can*	*always*	*has*

c) Now read this short passage and then if you are unsure what any words mean ask the teacher and the rest of the class. If you know the answer to somebody else's question, and the teacher asks you to answer, practice using your general words to give the meaning.
e.g. a) engine -
a thing for making a car move

Motor spirit, or motor fuel, is often called 'gas' in America and 'petrol' in Britain. This is one of the most important petroleum products. Motor spirit is a gasoline consisting of a mixture of paraffins, aromatics and olefins. In many countries, two or more grades of motor spirit are available. Motor spirit is volatile, that is, it vaporizes easily. When mixed with air, motor spirit ignites quickly.

Diesel fuel, or gas oil, is designed for use in marine, industrial and transport engines. Special diesel fuel for use in high speed engines, for example in buses and trucks, is known as DERV (**Diesel Engine Road Vehicle**). Diesel fuels are less volatile than motor spirit.

Two types of **jet fuel** are available for jet aircraft. One is **aviation turbine kerosine** (avtur) and the other is **aviation turbine gasoline** (avtag). Both avtur and avtag must be completely free from impurities. Moreover, these fuels must flow at low temperatures. Aviation fuels must also be stable at high temperatures.

1. *If you don't know a word, ask a question.*
2. *If you can, answer questions.*
3. *If nobody knows, and the teacher answers, is he stating or guessing? (Check back to Unit 6 if you aren't sure.)*

Of relevance here is a knowledge of how to act on the provisional sense relations discussed earlier, hyponymy and superordinacy, synonymy and antonymy etc., to perform 'achievement' strategies like 'substitution' and 'paraphrase' e.g.

(4) NS: do you have any animals —
L: (laugh) yes — er — er that is er — I don't know how I shall say that in English —
[...]
NS: I think they must be rabbits —
L: er what
NS: rabbits —
L: rabbits —
NS: yer rabbits
[...]
NS: does it — sleep on — in your room
L: er my — *my animals* —
NS: mm your animal

(5) L: [...] some people have a car — and some people have a er bicycle — and some people have a er — erm — a cykel there is a m motor
NS: oh a bicycle — with a motor

(from Faerch&Kasper 1983)

While such strategies could be said to help the learner, or language user, make the 'propositional' content of the message clear, they can also be used, as Thomas has shown (1985) as ways of exerting 'power' over

an interlocutor on what Halliday would call the 'interpersonal' dimension of the discourse; for example- after a long conversation with a subordinate police constable the Inspector sums up, or paraphrases like this;

Inspector: Are you suggesting there's a bit of a conspiracy to put a skids under you?
Constable: ...conspiracy, I can't say that , Sir.

where the Inspector makes use of the pragmatic tactic of reformulating, using 'conspiracy' - which implies 'wrong doing' - thus making the subordinate back-down, because he doesn't have the 'power' to accuse his superior of wrong-doing directly. Such tactics can be effectively countered though where the relationship between the participants is more equal, as in this example;

Politician: I don't deny that the Government is right to put security at the top of their priorities...But on the other hand they could have handled it better.
Interviewer. Are you saying they cocked it up?
Politician. You said that. What I said was....

(from Thomas 1985)

Whether we teach such strategies directly or not, the knowledge of the words they draw on, i.e. that 'conspiracy' implies illegality, or that 'cocked it up' is a pejorative variant on 'made a mistake' are certainly examples of the kinds of lexical knowledge advanced learners are interested in acquiring, and it seems sensible to teach them in scenarios which draw on the related 'procedural 'knowledge of how to reformulate in strategically appropriate circumstances.

Discourse Competence: Cohesion, Coherence, Specificity And Implicature

Finally, a discourse perspective on lexical competence returns us to the issues raised by McCarthy (1984:1987) of the need to develop awareness of the role of intonation in signalling 'equivalence', and of the way, in

negotiation, the static 'structural semantic' relations of superordinacy, synonymy, are in a much more fluid reàationship to each other. I can do no more than touch on these issues here. There is the important area of choice of level of specificity (Cruse 1977;1986) in which deviance from a 'core' unmarked level of specificity generates additional implicatures.(Grice 1975). For example, as Cruse observes, the 'basic level concept' is most often the neutral level of specificity; in this case 'dog' is a more basic concept than that of 'animal' or 'alsation'. He rationalises this by expàaining that it is more likely to be the case that an animal is a dog is important, than that a dog is an alsation, or that an alsation is an animal. (see Brown 1973 on basic level concepts). 'Dog' is therefore the unmarked choice;

- Where are you going dear?

- I'm going to take the { alsation / dog / animal } for a walk.

Choice of a markedly over or under specific word generates additional implicature. In the case of 'alsation' it implies more than one dog, in the case of 'animal' it implies dislike. Mehrabian (1971) has also pointed to the link between choice of specific items and degrees of liking.

- Tom let me drive his new { Chevrolet / car / vehicle } today.

The more specific term indicating greater enthusiasm. Apart from the issue of synonymy and prominence discussed earlier;

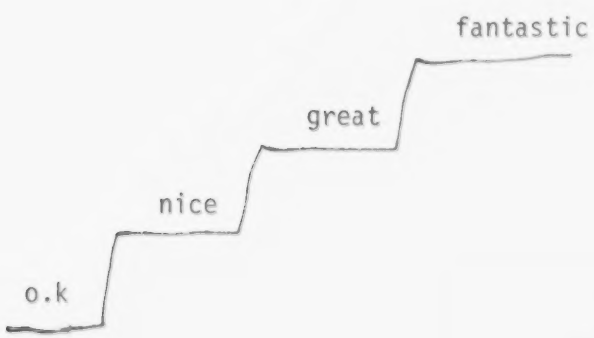
- I didn-t think it was very SUBTLE , the way he handled it.

- It was BLATANT.

where prominence signals the creation of a new 'sense paradigm' by one speaker, there are issues relating to the role of sense relations in 'lexical take up';

- I thought the film was great tonight.

- Yes, it was fantastic / nice / o.k.



where choice of an item from above, or below the initially offered item on an intensity scale has communicative consequences. Again, superordinacy, or under specificity, appears to be used to communicative effect in this example of 'encapsulation';

- I hope you got the bananas I asked for.

- Yes I got your FRUIT but I forgot the cigarettes.

it not only establishes cohesion, but it indicates a certain disdain or downplaying of importance for fruit versus cigarettes.

In written text the role of sense relations is important in establishing cohesion;

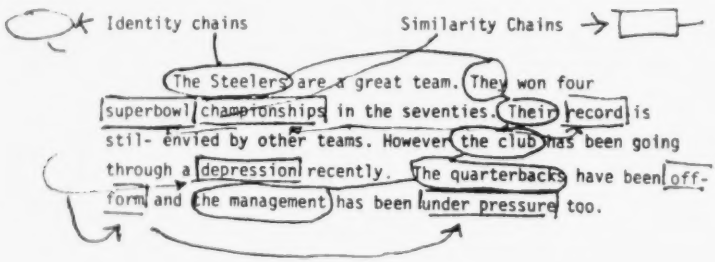
I went for a walk. The walk was tiring. (repetition)

I went for a climb. The ascent was easy (synonym)

I went to the park. The gardens were lovely (near-synonym)

I oredered a Rolling Rock. The beer was cool. (superordinate)

while the proforms like 'do' and 'it' identified earlier as of procedural use are also important in establishing what Hasan (1984) calls identity chains of reference in written text. These are distinct from the sorts of chain which ' refelect the composition of semantic fields which lie outside the text'. These she calls 'similarity chains'. These are invoked, for example, by the use of sailor and dove which are linked to each other by virtue of the schematic knowledge we have of sailors, sea and therefore of diving. Here is an example of the two kinds of chain;


Identity chains
Similarity Chains
The Steelers are a great team. They won four superbowl championships in the seventies. Their record is stil- envied by other teams. However the club has been going through a depression recently. The quarterbacks have been off-form and the management has been under pressure too.

The use of words in signalling the structure of texts is also important; for example Winter (1977) has identified a number of items that seem to signal when various stages in the macrostructure of texts are being realised. The macro-plan which he suggests as basic is;

Situation - problem - solution - evaluation

and various words, like 'problem, solution' themselves signal when these stages are being realised in the text. (see Hoey 1984: Jordan 1984) Here is an example of the macro structure from Crombie (1985) Consider the structure signalling role of the words; 'proposed', 'problem' 'attempted' and 'advantage' in this text.

DISCOURSE ELEMENTS

Situation	Pauling and Corey have proposed a model for the structure of D.N.A. Their model consists of three intertwined chains, with the phosphates near the fibre axis and the bases on the outside.
Problem	The problem is that their model fails to identify the forces which could hold the structure together.
Solution	We have attempted to solve this problem by proposing a radically different structure which has two helical chains each coiled around the same axis and in which the two chains are held together by the purine and pyramidine bases.
Evaluation	Our model has two advantages. It accounts for the structural cohesion and it suggests a possible copying mechanism for the genetic material.

DISCOURSE MACRO-PATTERN: Situation — Problem — Solution — Evaluation

(Crombie 1985:59)

Practice in identifying and using such words can be particularly useful to students who have to read many academic articles, and who therefore want to be able to identify the problem and suggested solutions in abstracts like these:

ON THE ROLE OF THE OBLIGATORY CONTOUR PRINCIPLE IN PHONOLOGICAL THEORY

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In autosegmental phonology, a sequence of adjacent identical tones can be represented (a) as a single tone mapped onto multiple vowels, (b) as a one-to-one mapping between multiple tones and vowels, or (c) as a combination of these extremes. The Obligatory Contour Principle (OCP) has been proposed as a constraint which restricts tonal representations to a one-to-many mapping between tones and vowels. It is argued here that the strongest form of the OCP is falsified by a number of languages which distinguish single vs. multiple tones associated with a sequence of vowels. The language-particular violations of the OCP constitute a strong argument for the full power of autosegmental phonology.*

INALTERABILITY IN CV PHONOLOGY

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Geminate consonants and long vowels frequently resist the application of rules that would a-priori be expected to apply to them; i.e., they are frequently 'inalterable'. This article argues that, by invoking the theory of CV Phonology, it is often possible to predict which phonological rules are unable to affect long segments. The prediction follows from rather minimal assumptions about how rules apply to forms.*

The ability to use these words, which are much less schema specific than words like 'pyramidine' 'genetic' phosphates', is an aspect of procedural ability in the construction and interpretation of written discourse. Let me conclude by ret urning to this distinction.

Conclusion; The Lexicon As Meaning Potential

My aim in this article has been to distinguish between the declarative and procedural dimensions of vocabulary knowledge. I have also suggested that these dimensions are reflected in the existence of two types of word, highly specific or technical 'lexical' words, and the more general 'delexical' words.

I have claimed that vocabulary materials in the past may have overemphasized the declarative, static meaning that attaches to a 'technical' word, while ignoring procedural aspects of vocabulary learning. This may have been because 'technical' words, for example, are often seen as more directly relevant to learners in specific subject areas, and consequently they are focussed on because they are more motivating, or have more 'face-validity'. However such words provide contexts for the development of 'assimilation' procedures involving more general, basic words. Hutchinson and Waters claim that it is proficiency in such 'everyday' words that is most important to technical subject students of English.

Knowing 'how' to use procedural words to negotiate the meaning of more technical, specific words, is essential to learners if they are to engage in fruitful classroom communication, involving the twin activities of asserting and assimilating meaning. I have given some arguments for seeing this debate over the 'sense' of words as crucial to the acquisition of 'structural knowledge', for learning grammar <u>through</u> lexis; in other words, the learner's procedural ability in the use of communication strategies will have direct consequences for the operation of his or her cognitive strategies, which are directed at learning the grammatical structure of language; both sets of strategies tending to focus, in their differing ways, on a reduced 'core' of highly indexical words.

A rich view of the communicative potential of lexis places the ability to engage such negotiating procedures at the heart of successful communication and language learning. I have proposed a framework for developing awareness of this potential based on Canale and Swain's checklist of the four dimensions of communicative competence. The example exercise types I have given are hopefully diverse; have as an organising principle the need to conjoin declarative and prodedural knowledge of

lexis; provide contexts for exchanges and discussion, and develop awareness of the structural relations between words. As such these exercises, and the larger framework, provide a basis for the organisation and presentation of lexis 'in tandem' with the realisation of the meaning potential words have in actual classroom negotiations . It is only through negotiation, assertion and assimilation, that learners can 'authenticate' the awareness they have of lexical grammar, lexis in discourse and lexical strategies by 'converting' it to the actual procedures used in attempting to bring the 'possible worlds' of participants in discourse to convergence, and thereby acheiving temporary communication, and more permanent language learning,

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